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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,073	01/24/2002	Eugen I. Cabuz	H10002273	3354

7590 11/14/2003
John G. Shudy, Jr.
Patent Services
Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962

EXAMINER

TAMAI, KARL I

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 11/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered 27 (the second 27) been renumbered 28.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 4, 5, 11, 14, 15, 20, 23, and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Sandstrom et al. (Sandstrom)(US 2002/012237). Sandstrom

teaches a high voltage electrostatic array with n capacitors in parallel with n actuators from n switches (see figure 3), where the switches are controlled by a central processor (addressing logic). The analog voltage signal inherently includes multiple, different slopes to the voltage signal.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 12, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandstrom et al. (Sandstrom)(US 2002/012237), in further view of Noro et al.(Noro)(JP 2001-339962). Sandstrom teaches every aspect of the invention except constant voltage signal. Noro teaches a constant voltage signal for electrostatic actuators to protect against overvoltage. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the optical mirror array of Sandstrom with a constant voltage source to protect against voltage overload.

7. Claims 8, 9, 17, 18, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandstrom et al. (Sandstrom)(US 2002/012237). Sandstrom teaches every aspect of the invention except the number of mirrors being from 1000 to 10000. It would have been obvious to a person of ordinary skill in the art at the time of the

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invention to construct the optical mirror array of Sandstrom with 1000 or 10000 actuators to optimize pixel resolution, and because it has been held that mere duplication of parts involves only routine skill in the art (see *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8).

Allowable Subject Matter

8. Claim 3, 7, 10, 13, 16, 19, 22, 25, and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number is (703) 305-7066. The examiner can be normally contacted on Monday through Friday from 8:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nestor Ramirez, can be reached at (703) 308-1371. The facsimile number for the Group is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Karl I Tamai
PRIMARY PATENT EXAMINER
October 30, 2003



KARL TAMAI
PRIMARY EXAMINER